

UNIVERSITY OF QUEENSLAND

Computer Centre

WEEKLY NEWSLETTER

Date : Week ended 10 June 1971

Authorization : Director of the Computer Centre

1. OPERATIONS

1.1 PDP-10 System

| | | | |
|-----------|----|------|---|
| Friday | 4 | June | Parity error maintenance, 2135-2200. |
| Monday | 7 | June | Amendments to accounting files, 1000-1015 System development, 1030-1050. |
| Tuesday | 8 | June | Alterations to accounting files, 1000-1020. |
| Wednesday | 9 | June | Batch only offline 1310-1410, during system development. |
| Thursday | 10 | June | System development, 0900-1000 and 2245-2300. |

Schedule for forthcoming week: Maintenance 0700-0900, 2300-2400
Operations 1000-2200

1.2 GE-225 System

Schedule for forthcoming week: Maintenance 0700-0900, 1130-1230
Operations 0900-1130, 1230-2400

2. LINE PRINTER AVAILABLE TO REMOTE TERMINAL USERS

Work on the first version of the line printer symbiont (spooling) system is now complete. This system has been implemented and will be available to remote terminal users from Tuesday June 15. Users can

transmit ASCII files to the printer symbiont for later printing by means of a new command LIST.

LIST Command

The general form of the command is:

LIST (F4) filename-1, ... , filename-n

The arguments, filename-1, ... , filename-n, give the names of the ASCII files to be printed.

The option F4 is used in the command to print ASCII files which have been output by a user's FORTRAN IV program and which contain the standard line printer carriage control characters used in FORTRAN (ref. FORTRAN IV Manual MNT-5, page 6-17). The option can be associated with the command, to apply to all files named in the argument list, or can be associated with individual files in the argument list.

examples:

- (i) To list two source files named PROG/F4 and TEST/MAC on the line printer

```
.LIST PROG/F4, TEST/MAC<cr>  
-LISTING THESE FILES-
```

```
PROG/F4  
TEST/MAC
```

```
EXIT  
↑C  
'  
.  
.
```

- (ii) To list an ASCII file named DOUT which has been produced by a FORTRAN program and contains FORTRAN printer carriage control characters.

```
.LIST (F4) DOUT<cr>  
-LISTING THESE FILES-
```

```
DOUT
```

```
EXIT  
↑C  
*  
.
```

- (iii) The three files contained in examples (i) and (ii) above could be listed with the one command as follows:-

```
.LIST PROG/F4, TEST/MAC, DOUT (F4) <cr>  
-LISTING THESE FILES-
```

```
PROG/F4  
TEST/MAC  
DOUT
```

```
EXIT  
↑C
```

.

Error Messages on Printed Output

The following error messages could appear on the printed output.

(a) *** PRINTING TERMINATED BY OPERATOR ***

There are two possible causes of this:

- (i) The job was slewing an unreasonably large number of forms without any printing. The printout will not be repeated.
- (ii) The line printer damaged the output while printing. This file will be repeated.

(b) *** ERROR READING DATA FILE ***

This results from an error on the disk file being printed. The operator is informed of this error and action will be taken to attempt to recover the file for later printing.

Administrative Arrangements

Output from the line printer is identified by name bands on the first and last pages (in the same way as batch output) and can be collected from the PDP-10 output shelves. It is anticipated that output will be available for collection within a few hours of the user listing the file. All printing tasks will be automatically charged at the published rates.

With the release of this facility, the temporary file listing service for remote terminal users will be discontinued.

3. PROFESSOR WILKES - SEMINAR - 23 JUNE 1971

"The Development of Multiple Access Computer Systems"

The venue will be the Wintergarden Room at Lennons Hotel in Brisbane.

The time of the seminar will be from 9.30 a.m. to 5.00 p.m.

The program will consist of four segments of about an hour each with time for discussion. The subjects for the seminar will be drawn from the following topics:

Design of a filing system

Implementation; archive systems; security of information.

Design principles

Queuing of tasks; time slicing; core space allocation; paging and segmentation; restart after failure.

Multi-processor and multi-computer systems

Satellite computers; control of displays; computer networks.

Management of a multiple access computer centre

Software aids to management; allocation of resources; prevention of unauthorised access.

Professor Wilkes will talk about the origins of timesharing systems and illustrate some of the features of the Cambridge multiple access system with the aid of a short film.

Morning and afternoon tea and a smorgasbord lunch will be provided and refreshments will be available at the conclusion of the day at 4.30 p.m.

The registration fee will be \$11.00 for members, \$16.00 for others.

Application forms are obtainable from the A.C.S. NEWSLETTER or from the Honorary Branch Secretary, Mr I.G. Petty, telephone 215222, or from the Branch Manager, O.V.P., Mr J.W. Barker, telephone 40151.

4. FORTRAN ERRORS

- (a) Users are reminded that use of large arguments for the sin and cosine functions may return values having appreciable errors in the sixth and succeeding figures.
- (b) The compiler will not produce an I-5 error message (NAME ALREADY USED AS NAMELIST NAME) for the following coding:

NAMELIST/FRED/F,G

FRED = 3.0

Instead it will accept the redefinition of FRED as a scalar variable. Any attempt to use FRED as a namelist name will result in an I-4 error message (NOT A VARIABLE FORMAT ARRAY).

- (c) The compiler treats digits that fall in the continuation field as a continuation indicator, regardless of the content preceding the continuation field.

example:

In the following coding, the statement READ 1Ø was ignored since the 1 was taken to be a continuation indicator. The number N was taken to be 160, instead of simply 16. The compiler failed to record any errors.

```
      N=16  
      READ 1Ø  
      1Ø    FORMAT( (          ) )
```

5. COBOL ERRORS

- (a) A COMPUTE statement with 5 nested pairs of brackets causes the COBOL compiler to get a Push Down List overflow.
- (b) The special data name TALLY is not always recognized as a defined field. Statements such as

```
      ADD n TO TALLY  
      SET TALLY UP BY n  
      MOVE n TO TALLY
```

will not compile. Use of TALLY should be avoided for the present.

- (c) Negative comparisons do not work correctly. For example the following coding

```
      .  
      .  
      .  
      77 CON5 PIC S99 VALUE -31.
```

.
.
.

COND3.

IF CON5 GREATER THAN -40 GO TO XYF
ELSE GO TO NOK2.

.
.
.

will result in the program branching to NOK2 although -31 is greater than -40.

- (d) In standard format, if the first character of a line is a tab, then this character is assumed to be at the 7th position, and the next character is assumed to be at the B-margin.

Items which should commence at the A-margin and are entered as above with a tab preceding them will not be **recognized**:

example:

<tab >IDENTIFICATION DIVISION.

will cause the error message

IDENTIFICATION EXPECTED

6. BASIC ERRORS

- (a) If an unquoted string that contains an apostrophe is typed in response to an INPUT statement, only the part of the string up to the apostrophe is accepted.

example:

? "TEST APOSTROPHE I'M TESTING"
will produce the complete message, but

? TEST APOSTROPHE I'M TESTING"
will produce only

TEST APOSTROPHE I

- (b) If an altmode is typed anywhere in an INPUT string the entire string is disregarded and the message DELETED appears.

example:

?TEST ALTMODE<altmode>DELETED

7. USE OF PLOTTER AND OVERLAYS

Users are advised that both the overlay and plotter subroutine cannot be used in the same program.

This is a temporary restriction which will be removed shortly.

8. UTILITY PROGRAMS

The Utility Programs manual, MNT-12, is now available at the University Bookshop. At present it contains details of Absolute Overlays and the plotter subroutines and these chapters are available for \$1.20.